

Abbreviations, Names and Units of Quantified Metabolic Measures

Lipoprotein Subclasses

Abbreviation	Full Name	Unit
XXL-VLDL-P	Concentration of chylomicrons and extremely large VLDL particles	mol/l
XXL-VLDL-L	Total lipids in chylomicrons and extremely large VLDL	mmol/l
XXL-VLDL-PL	Phospholipids in chylomicrons and extremely large VLDL	mmol/l
XXL-VLDL-C	Total cholesterol in chylomicrons and extremely large VLDL	mmol/l
XXL-VLDL-CE	Cholesterol esters in chylomicrons and extremely large VLDL	mmol/l
XXL-VLDL-FC	Free cholesterol in chylomicrons and extremely large VLDL	mmol/l
XXL-VLDL-TG	Triglycerides in chylomicrons and extremely large VLDL	mmol/l
XL-VLDL-P	Concentration of very large VLDL particles	mol/l
XL-VLDL-L	Total lipids in very large VLDL	mmol/l
XL-VLDL-PL	Phospholipids in very large VLDL	mmol/l
XL-VLDL-C	Total cholesterol in very large VLDL	mmol/l
XL-VLDL-CE	Cholesterol esters in very large VLDL	mmol/l
XL-VLDL-FC	Free cholesterol in very large VLDL	mmol/l
XL-VLDL-TG	Triglycerides in very large VLDL	mmol/l
L-VLDL-P	Concentration of large VLDL particles	mol/l
L-VLDL-L	Total lipids in large VLDL	mmol/l
L-VLDL-PL	Phospholipids in large VLDL	mmol/l
L-VLDL-C	Total cholesterol in large VLDL	mmol/l
L-VLDL-CE	Cholesterol esters in large VLDL	mmol/l
L-VLDL-FC	Free cholesterol in large VLDL	mmol/l
L-VLDL-TG	Triglycerides in large VLDL	mmol/l
M-VLDL-P	Concentration of medium VLDL particles	mol/l
M-VLDL-L	Total lipids in medium VLDL	mmol/l
M-VLDL-PL	Phospholipids in medium VLDL	mmol/l
M-VLDL-C	Total cholesterol in medium VLDL	mmol/l
M-VLDL-CE	Cholesterol esters in medium VLDL	mmol/l
M-VLDL-FC	Free cholesterol in medium VLDL	mmol/l
M-VLDL-TG	Triglycerides in medium VLDL	mmol/l
S-VLDL-P	Concentration of small VLDL particles	mol/l
S-VLDL-L	Total lipids in small VLDL	mmol/l
S-VLDL-PL	Phospholipids in small VLDL	mmol/l
S-VLDL-C	Total cholesterol in small VLDL	mmol/l
S-VLDL-CE	Cholesterol esters in small VLDL	mmol/l
S-VLDL-FC	Free cholesterol in small VLDL	mmol/l
S-VLDL-TG	Triglycerides in small VLDL	mmol/l

XS-VLDL-P	Concentration of very small VLDL particles	mol/l
XS-VLDL-L	Total lipids in very small VLDL	mmol/l
XS-VLDL-PL	Phospholipids in very small VLDL	mmol/l
XS-VLDL-C	Total cholesterol in very small VLDL	mmol/l
XS-VLDL-CE	Cholesterol esters in very small VLDL	mmol/l
XS-VLDL-FC	Free cholesterol in very small VLDL	mmol/l
XS-VLDL-TG	Triglycerides in very small VLDL	mmol/l
IDL-P	Concentration of LDL particles	mol/l
IDL-L	Total lipids in LDL	mmol/l
IDL-PL	Phospholipids in LDL	mmol/l
IDL-C	Total cholesterol in LDL	mmol/l
IDL-CE	Cholesterol esters in LDL	mmol/l
IDL-FC	Free cholesterol in LDL	mmol/l
IDL-TG	Triglycerides in LDL	mmol/l
L-LDL-P	Concentration of large LDL particles	mol/l
L-LDL-L	Total lipids in large LDL	mmol/l
L-LDL-PL	Phospholipids in large LDL	mmol/l
L-LDL-C	Total cholesterol in large LDL	mmol/l
L-LDL-CE	Cholesterol esters in large LDL	mmol/l
L-LDL-FC	Free cholesterol in large LDL	mmol/l
L-LDL-TG	Triglycerides in large LDL	mmol/l
M-LDL-P	Concentration of medium LDL particles	mol/l
M-LDL-L	Total lipids in medium LDL	mmol/l
M-LDL-PL	Phospholipids in medium LDL	mmol/l
M-LDL-C	Total cholesterol in medium LDL	mmol/l
M-LDL-CE	Cholesterol esters in medium LDL	mmol/l
M-LDL-FC	Free cholesterol in medium LDL	mmol/l
M-LDL-TG	Triglycerides in medium LDL	mmol/l
S-LDL-P	Concentration of small LDL particles	mol/l
S-LDL-L	Total lipids in small LDL	mmol/l
S-LDL-PL	Phospholipids in small LDL	mmol/l
S-LDL-C	Total cholesterol in small LDL	mmol/l
S-LDL-CE	Cholesterol esters in small LDL	mmol/l
S-LDL-FC	Free cholesterol in small LDL	mmol/l
S-LDL-TG	Triglycerides in small LDL	mmol/l
XL-HDL-P	Concentration of very large HDL particles	mol/l
XL-HDL-L	Total lipids in very large HDL	mmol/l
XL-HDL-PL	Phospholipids in very large HDL	mmol/l
XL-HDL-C	Total cholesterol in very large HDL	mmol/l
XL-HDL-CE	Cholesterol esters in very large HDL	mmol/l
XL-HDL-FC	Free cholesterol in very large HDL	mmol/l
XL-HDL-TG	Triglycerides in very large HDL	mmol/l

L-HDL-P	Concentration of large HDL particles	mol/l
L-HDL-L	Total lipids in large HDL	mmol/l
L-HDL-PL	Phospholipids in large HDL	mmol/l
L-HDL-C	Total cholesterol in large HDL	mmol/l
L-HDL-CE	Cholesterol esters in large HDL	mmol/l
L-HDL-FC	Free cholesterol in large HDL	mmol/l
L-HDL-TG	Triglycerides in large HDL	mmol/l
M-HDL-P	Concentration of medium HDL particles	mol/l
M-HDL-L	Total lipids in medium HDL	mmol/l
M-HDL-PL	Phospholipids in medium HDL	mmol/l
M-HDL-C	Total cholesterol in medium HDL	mmol/l
M-HDL-CE	Cholesterol esters in medium HDL	mmol/l
M-HDL-FC	Free cholesterol in medium HDL	mmol/l
M-HDL-TG	Triglycerides in medium HDL	mmol/l
S-HDL-P	Concentration of small HDL particles	mol/l
S-HDL-L	Total lipids in small HDL	mmol/l
S-HDL-PL	Phospholipids in small HDL	mmol/l
S-HDL-C	Total cholesterol in small HDL	mmol/l
S-HDL-CE	Cholesterol esters in small HDL	mmol/l
S-HDL-FC	Free cholesterol in small HDL	mmol/l
S-HDL-TG	Triglycerides in small HDL	mmol/l
XXL-VLDL-PL_%	Phospholipids to total lipids ratio in chylomicrons and extremely large VLDL	%
XXL-VLDL-C_%	Total cholesterol to total lipids ratio in chylomicrons and extremely large VLDL	%
XXL-VLDL-CE_%	Cholesterol esters to total lipids ratio in chylomicrons and extremely large VLDL	%
XXL-VLDL-FC_%	Free cholesterol to total lipids ratio in chylomicrons and extremely large VLDL	%
XXL-VLDL-TG_%	Triglycerides to total lipids ratio in chylomicrons and extremely large VLDL	%
XL-VLDL-PL_%	Phospholipids to total lipids ratio in very large VLDL	%
XL-VLDL-C_%	Total cholesterol to total lipids ratio in very large VLDL	%
XL-VLDL-CE_%	Cholesterol esters to total lipids ratio in very large VLDL	%
XL-VLDL-FC_%	Free cholesterol to total lipids ratio in very large VLDL	%
XL-VLDL-TG_%	Triglycerides to total lipids ratio in very large VLDL	%
L-VLDL-PL_%	Phospholipids to total lipids ratio in large VLDL	%
L-VLDL-C_%	Total cholesterol to total lipids ratio in large VLDL	%
L-VLDL-CE_%	Cholesterol esters to total lipids ratio in large VLDL	%
L-VLDL-FC_%	Free cholesterol to total lipids ratio in large VLDL	%
L-VLDL-TG_%	Triglycerides to total lipids ratio in large VLDL	%

M-VLDL-PL_%	Phospholipids to total lipids ratio in medium VLDL	%
M-VLDL-C_%	Total cholesterol to total lipids ratio in medium VLDL	%
M-VLDL-CE_%	Cholesterol esters to total lipids ratio in medium VLDL	%
M-VLDL-FC_%	Free cholesterol to total lipids ratio in medium VLDL	%
M-VLDL-TG_%	Triglycerides to total lipids ratio in medium VLDL	%
S-VLDL-PL_%	Phospholipids to total lipids ratio in small VLDL	%
S-VLDL-C_%	Total cholesterol to total lipids ratio in small VLDL	%
S-VLDL-CE_%	Cholesterol esters to total lipids ratio in small VLDL	%
S-VLDL-FC_%	Free cholesterol to total lipids ratio in small VLDL	%
S-VLDL-TG_%	Triglycerides to total lipids ratio in small VLDL	%
XS-VLDL-PL_%	Phospholipids to total lipids ratio in very small VLDL	%
XS-VLDL-C_%	Total cholesterol to total lipids ratio in very small VLDL	%
XS-VLDL-CE_%	Cholesterol esters to total lipids ratio in very small VLDL	%
XS-VLDL-FC_%	Free cholesterol to total lipids ratio in very small VLDL	%
XS-VLDL-TG_%	Triglycerides to total lipids ratio in very small VLDL	%
IDL-PL_%	Phospholipids to total lipids ratio in IDL	%
IDL-C_%	Total cholesterol to total lipids ratio in IDL	%
IDL-CE_%	Cholesterol esters to total lipids ratio in IDL	%
IDL-FC_%	Free cholesterol to total lipids ratio in IDL	%
IDL-TG_%	Triglycerides to total lipids ratio in IDL	%
L-LDL-PL_%	Phospholipids to total lipids ratio in large LDL	%
L-LDL-C_%	Total cholesterol to total lipids ratio in large LDL	%
L-LDL-CE_%	Cholesterol esters to total lipids ratio in large LDL	%
L-LDL-FC_%	Free cholesterol to total lipids ratio in large LDL	%
L-LDL-TG_%	Triglycerides to total lipids ratio in large LDL	%
M-LDL-PL_%	Phospholipids to total lipids ratio in medium LDL	%
M-LDL-C_%	Total cholesterol to total lipids ratio in medium LDL	%
M-LDL-CE_%	Cholesterol esters to total lipids ratio in medium LDL	%
M-LDL-FC_%	Free cholesterol to total lipids ratio in medium LDL	%
M-LDL-TG_%	Triglycerides to total lipids ratio in medium LDL	%
S-LDL-PL_%	Phospholipids to total lipids ratio in small LDL	%
S-LDL-C_%	Total cholesterol to total lipids ratio in small LDL	%
S-LDL-CE_%	Cholesterol esters to total lipids ratio in small LDL	%
S-LDL-FC_%	Free cholesterol to total lipids ratio in small LDL	%
S-LDL-TG_%	Triglycerides to total lipids ratio in small LDL	%
XL-HDL-PL_%	Phospholipids to total lipids ratio in very large HDL	%
XL-HDL-C_%	Total cholesterol to total lipids ratio in very large HDL	%
XL-HDL-CE_%	Cholesterol esters to total lipids ratio in very large HDL	%
XL-HDL-FC_%	Free cholesterol to total lipids ratio in very large HDL	%
XL-HDL-TG_%	Triglycerides to total lipids ratio in very large HDL	%

L-HDL-PL_%	Phospholipids to total lipids ratio in large HDL	%
L-HDL-C_%	Total cholesterol to total lipids ratio in large HDL	%
L-HDL-CE_%	Cholesterol esters to total lipids ratio in large HDL	%
L-HDL-FC_%	Free cholesterol to total lipids ratio in large HDL	%
L-HDL-TG_%	Triglycerides to total lipids ratio in large HDL	%
M-HDL-PL_%	Phospholipids to total lipids ratio in medium HDL	%
M-HDL-C_%	Total cholesterol to total lipids ratio in medium HDL	%
M-HDL-CE_%	Cholesterol esters to total lipids ratio in medium HDL	%
M-HDL-FC_%	Free cholesterol to total lipids ratio in medium HDL	%
M-HDL-TG_%	Triglycerides to total lipids ratio in medium HDL	%
S-HDL-PL_%	Phospholipids to total lipids ratio in small HDL	%
S-HDL-C_%	Total cholesterol to total lipids ratio in small HDL	%
S-HDL-CE_%	Cholesterol esters to total lipids ratio in small HDL	%
S-HDL-FC_%	Free cholesterol to total lipids ratio in small HDL	%
S-HDL-TG_%	Triglycerides to total lipids ratio in small HDL	%

Lipoprotein Particle Size

VLDL-D	Mean diameter for VLDL particles	nm
LDL-D	Mean diameter for LDL particles	nm
HDL-D	Mean diameter for HDL particles	nm

Cholesterol

Serum-C	Serum total cholesterol	mmol/l
VLDL-C	Total cholesterol in VLDL	mmol/l
Remnant-C	Remnant cholesterol (non-HDL, non-LDL -cholesterol)	mmol/l
LDL-C	Total cholesterol in LDL	mmol/l
HDL-C	Total cholesterol in HDL	mmol/l
HDL2-C	Total cholesterol in HDL2	mmol/l
HDL3-C	Total cholesterol in HDL3	mmol/l
EstC	Esterified cholesterol	mmol/l
FreeC	Free cholesterol	mmol/l

Glycerides and Phospholipids

Serum-TG	Serum total triglycerides	mmol/l
VLDL-TG	Triglycerides in VLDL	mmol/l
LDL-TG	Triglycerides in LDL	mmol/l
HDL-TG	Triglycerides in HDL	mmol/l
TotPG	Total phosphoglycerides	mmol/l
TG/PG	Ratio of triglycerides to phosphoglycerides	
PC	Phosphatidylcholine and other cholines	mmol/l

SM	Sphingomyelins	mmol/l
TotCho	Total cholines	mmol/l

Apolipoproteins

ApoA1	Apolipoprotein A-I	g/l
ApoB	Apolipoprotein B	g/l
ApoB/ApoA1	Ratio of apolipoprotein B to apolipoprotein A-I	

Fatty Acids and Saturation Measures

TotFA	Total fatty acids	mmol/l
DHA	22:6, docosahexaenoic acid	mmol/l
LA	18:2, linoleic acid	mmol/l
FAw3	Omega-3 fatty acids	mmol/l
FAw6	Omega-6 fatty acids	mmol/l
PUFA	Polyunsaturated fatty acids	mmol/l
MUFA	Monounsaturated fatty acids; 16:1, 18:1	mmol/l
SFA	Saturated fatty acids	mmol/l
UnSat	Estimated degree of unsaturation	

Fatty Acids (%)

DHA/FA	Ratio of 22:6 docosahexaenoic acid to total fatty acids	%
LA/FA	Ratio of 18:2 linoleic acid to total fatty acids	%
FAw3/FA	Ratio of omega-3 fatty acids to total fatty acids	%
FAw6/FA	Ratio of omega-6 fatty acids to total fatty acids	%
PUFA/FA	Ratio of polyunsaturated fatty acids to total fatty acids	%
MUFA/FA	Ratio of monounsaturated fatty acids to total fatty acids	%
SFA/FA	Ratio of saturated fatty acids to total fatty acids	%

Glycolysis Related Metabolites

Glc	Glucose	mmol/l
Lac	Lactate	mmol/l
Pyr	Pyruvate*	mmol/l
Cit	Citrate	mmol/l
Glol	Glycerol*	mmol/l

Amino Acids

Ala	Alanine	mmol/l
Gln	Glutamine	mmol/l
Gly	Glycine*	mmol/l
His	Histidine	mmol/l

Branched---chain amino acids

Ile	Isoleucine	mmol/l
Leu	Leucine	mmol/l
Val	Valine	mmol/l

Aromatic amino acids

Phe	Phenylalanine	mmol/l
Tyr	Tyrosine	mmol/l

Ketone Bodies

Ace	Acetate	mmol/l
AcAce	Acetoacetate	mmol/l
bOHBut	3-hydroxybutyrate	mmol/l

Fluid Balance and Inflammation

Crea	Creatinine	mmol/l
Alb	Albumin	signal area
Gp	Glycoprotein acetyls, mainly a1-acid glycoprotein	mmol/l

* Not quantifiable for EDTA-plasma samples